

The Nature Conservancy



Protecting nature. Preserving life.™

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EXHIBIT
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BUREAU OF WATER PROTECTION AND LAND REUSE
OFFICE OF THE BUREAU CHIEF
FEB 04 2010

Paul E. Stacey
Connecticut Department of Environmental Protection
Bureau of Water Protection and Land Reuse
Planning & Standards Division
79 Elm Street
Hartford, Connecticut 06106-5127

February 2, 2010

Dear Mr. Stacey:

I am pleased to submit these comments on Draft regulations RCSA sections 26-141b-1 to 26-141b-9, known as the Stream Flow Standards and Regulations on behalf of The Nature Conservancy. The Nature Conservancy is an international, nonprofit organization whose mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth. Our work is supported by approximately 24,000 members in Connecticut.

Connecticut has rich and diverse freshwater systems. Over thousands of years, the plants and animals of these river systems have evolved to depend on natural water flows to survive. For example, fish like shad and herring migrate and spawn during times of high flows and important recreational species like brook trout require clean, cold and flowing water in which to live.

The water provided by these natural resources is also critical to people and communities – providing water for our most basic needs, sustaining our economy, providing recreation opportunities, and improving our quality of life. These rivers are also an economic engine in their own right -- each year, over \$230 million is spent on freshwater fishing and related activities in Connecticut.¹

The statute calls for the Department to establish a clear set of environmental goals for the rivers and streams of Connecticut in a manner that ensures these public natural resources continue to support our communities, our environment and our economy. These draft regulations are an important step in building a solid foundation for a sustainable water future in Connecticut: *Water for people and water for nature.*

We strongly support the implementation of new regulations as required by the passage of Senate Bill 1294 in 2005. The framework of the current draft appropriately provides protection to all rivers and streams by setting standards for dams, groundwater withdrawals, direct withdrawals and all other structures that affect the flow of these rivers and streams. As required, they are

¹ 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, U.S. Fish and Wildlife Service as reported by the American Sportfishing Association, January 2008.

based on the best available science and are a result of over three years of public process that included participation from a full spectrum of interests.

To be effective, the entire framework should be promulgated rather than separating the classification sections from the standards and implementation sections. Classification of rivers and streams will be difficult, if not impossible, if these classifications are not associated with specific levels of protection and specific implementation requirements. These goals and standards provide an important benchmark which the Department, water users, and the public can use to inform the decisions on the appropriate class for each river and stream in the state. In addition, for water users to effectively use the time provided within the regulation to come into compliance, clear requirements must be included as part of the management framework.

The draft developed by the Department includes several important features that provide for a logical, efficient and protective approach to the protection of stream flows and the balancing with other water needs. These include:

- They recognize that all rivers are not the same and should have different management objectives.
- They ensure that during droughts and other times of extreme scarcity that human needs come first.
- They appropriately exempt diversions of water used for emergencies and certain government regulated or operated structures such as flood control and hydropower dams.
- They include an ongoing and broad public participation component to ensure the public has a meaningful role in determining the future of the rivers and streams across Connecticut.
- They improve the transparency and predictability of the regulatory system and will help guide future water supply development to the most appropriate areas.
- They provide flexibility for how the requirements can be met.
- They provide more than ample time for implementation, allowing adequate time for communities and water companies to determine the most effective and cost-efficient means for meeting the requirements.
- They include management approaches based on a combination of biologically-based seasons and local hydrology that will ensure the requirements are based on local conditions.
- They recognize the fact that dams and their impoundments impact flows differently than direct withdrawals and withdrawals from groundwater and therefore appropriately design different management approaches for each.

- They ensure that existing permits and DEP approved management arrangement are honored.

While we support of the overall regulations and the approach they take, we recommend a number of important changes and improvements to the regulations. To strengthen the protections of rivers and streams as intended in the act, we recommend the Department:

- Eliminate or strengthen the narrative standard for class 4 rivers by including a specific environmental standard similar to the other classes. Currently, the draft narrative standard for class 4 offers no basic environmental protection and may not be consistent with other state standards.
- Ensure that the presence of threatened, endangered or otherwise listed species are specifically considered during the river and stream classification process.
- Clarify and strengthen the language in numerous places as described below.

To ensure these regulations can be implemented in a pragmatic and a consistent manner, we also urge the Department to consider:

1. Including simplified standards for small and seldom used existing impoundments and provide a few additional exemptions from the standards.
2. Provide an additional, less cumbersome alternative compliance mechanism through use of "Site-Specific Flow Management Plans".
3. Limit the use of multi-party Flow Management Compacts to cases where compliance with the presumptive standards are not sufficient to meet the narrative standards for the river segment.
4. That the presumptive standards for direct withdrawals and groundwater withdrawals be modified to provide for greater withdrawals of water as a matter of rule, with appropriate reductions in these withdrawals during times of low water.

More specifically, we ask the Department to consider:

Definitions:

Sec. 26-141b-2 (18) & (19) The plain language of the statute is clear that the standards apply to all rivers and streams and to "any dam or other structure is maintained in this state which impounds, or diverts, the waters of a river or stream or which dam or other structure affects the flow of water in such a river or stream." The phrase 'dam or other structure' is clearly inclusive of all such structures, including direct withdrawals and groundwater withdrawals, that affects the flow of water in rivers and streams. This plain language is consistent with the legislatively articulated definitions of 'diversion' and 'divert' as found in Sec. 22a-367 of Chapter 446i and therefore we support the definition as provided in the draft regulations.

Sec. 26-141b-2 (4-11) – Clarifying the definition for bioperiod flows that they are the *estimated naturally occurring* flows expected to have existed in the river or stream system for that bioperiod.

Sec. 26-141b-2 Including a definition for the term *release* as used in the presumptive standards. The definition should make clear that a release includes all water that moves over, through or around a dam, including both controlled and uncontrolled releases and any seepage through the dam.

Applicability:

Sec. 26-141b-3(c)(3) Expanding the exemption for diversions for fire emergencies to include diversions for fire and for any other public safety or public health emergency.

Sec. 26-141b-3(c)(8) – Clarifying that this exemption is for a withdrawal from surface waters that *does not exceed* fifty thousand gallons of water during any twenty-four-hour period.

Sec. 26-141b-3(c)(16) – We do not agree that a flow compact as provided for in 26-141b-7 is ‘exempt’ from the regulations. Rather, a flow compact is an alternative means of compliance with the regulations. This section should be eliminated.

Sec. 26-141b-3(c)(12), (19) and (20) be moved out of the exemption section and into a new presumptive standards section in Sec. 26-141b-6. This is important both because the required minimum releases described in these sections are appropriate presumptive standards -- no matter on what class river these systems occur -- and is also important in order to make clear that the reduced release requirements provided in section Sec. 26-141b-6(a)(4) during drought conditions apply to these small systems as well.

Sec. 26-141b-3(c)(12), (19) and (20) – Changing the minimum release rule from 0.1 cfs to releasing, *at a minimum, 0.1 cfs or the amount that would have naturally flowed in, whichever is less*. For many small systems maintaining a constant 0.1 release will be far easier to implement than estimating inflows, however such language will ensure that where warranted systems will not be required to augment streams during the infrequent times when they are naturally flowing lower than 0.1 cfs.

Sec. 26-141b-3(c) (19) and (20) – Clarifying that the presumptive standards for impoundments with small upstream reservoirs and those with less than 1 mile between reservoirs apply to *existing* reservoirs only and not to any new reservoirs.

Sec. 26-141b-3(c) -- Including a presumptive standard for dams and other structures that have a storage volume equivalent to less than 10% of the mean annual flow as estimated using a period of record developed by the USGS or otherwise acceptable to the Commissioner and that releases daily a minimum of 0.1 cfs of water or the amount that would have naturally flowed in, whichever is less. This will help facilitate compliance for systems with very small, downstream reservoirs.

Sec. 26-141b-3(c) -- Including a new presumptive standard for *existing* infrequently used impoundments. The exemption for operation of these structures, generally back-up water supplies, should include a requirement that it apply only to small impoundments (those that impound 10% or less of mean annual flow) and include a requirement that when water is diverted from the impoundment such dams and impoundments meet the same release requirements as impoundments drawn down for aquatic weed control (e.g. .15 cfs release). Infrequently used impoundments will need to be defined (e.g. divert water on average less than once per year). Such a presumptive standard is more appropriate than including these types of impoundments as run-of-river dams.

Sec. 26-141b- 3(c)(20) -- Modifying the part of the presumptive standard for reaches between reservoirs regarding the releases of the downstream most dam to be consistent with the suggested new requirement for reservoirs that store less than 10% or more of the mean average flow.

Sec. 26-141b- 3(c) -- Including a new exemption for *existing* impoundments in very small watersheds where any release requirement is likely to be impractical and unlikely to provide meaningful ecological benefit. These exemptions would be limited to very small watersheds (e.g. less than 1 square mile).

Narrative Standards:

We support the inclusion of the narrative standards for defining environmental goals for different river classes. Such narrative standards have been effectively used in other water protection statutes to ensure that the desired ecological outcome, and not just a set of specific criteria, are achieved and strived for under the statute.

Sec. 26-141b-4(d) -- That the Class 4 narrative standard either be eliminated or, at a minimum, include a clear environmental protection standard to ensure a specific level of protection and to ensure consistency with other state standards. The Department should consider making it consistent with the other standards but consider using the term 'typically present in *flowing*' instead of 'typically present in free-flowing' to indicate the need to maintain some riverine conditions while exhibiting 'altered flow conditions caused by human activity as necessary to provide for the legitimate needs and requirements of public health and safety, flood control, industry, public utilities, water supply, agriculture and other lawful uses.'

Classification:

Sec. 26-141b-5 (a) -- Including an additional factor to require the consideration of the presence of federal or state threatened, endangered or other special species of special concern when classifying rivers and streams.

Sec. 26-141b-5 (a) -- Explicitly communicating the Department's often stated intent on how certain river segments will be classified by stating that the Commissioner shall propose that a river or stream reach immediately below any dam or structure that impounds more than 10% of the mean annual flow or where a groundwater or direct withdrawal equals or exceeds 50% of the annual Q99 be initially classified as a class 3 segment. It should also be stated that such a determination may be changed as a result of the public participation process.

We recommend the addition of a new 'severability' clause within the classification section to clarify that if the classification of one or more river or stream segments is challenged or otherwise delayed, that the remaining classifications go into effect upon publication.

Presumptive Standards:

We support the use of presumptive standards to provide a predictable and straightforward manner for complying with the regulations. We urge the department to consider the following changes to the presumptive standards:

Sec. 26-141b-6(a)(2) & (3) -- Clarifying that these are not required minimum releases but that the dam owners or operators must, *at a minimum*, release the described volumes of water. Often spills and other high flows releases will exceed these recommended releases.

Sec. 26-141b-6(a)(2) & (3) -- The Department should consider whether any incentives can be offered for earlier compliance.

Sec. 26-141b-6(a) -- Adding a section that clarifies that if systems cannot meet the timeframes for implementation prescribed in this section that they be required to seek a temporary variance from the Commissioner as described in Sec. 26-141b-6(c) and that this application for variance describe the timeline and specific steps, including the implementation of best management practices, that will be undertaken to ultimately bring the system into compliance.

Sec. 26-141b-6(a) -- Adding a section to clarify that in determining appropriate compliance schedules outside of the prescribed timeframes, the Commissioner should consider the ability of the water supply system to maintain an adequate margin of safety, as described in Chapter 25-32d of the Department of Public Health regulations. For example, the regulation might specify that systems must, at a minimum, maintain a margin of safety of at least 1.05 of the average day demand for reservoirs and 1.05 of maximum monthly demand for direct and groundwater withdrawals.

Sec. 26-141b-6(a)(2) & (3) -- If Class 4 is not eliminated, making the Class 4 presumptive standard that water users be required to meet, to the extent practicable, the presumptive standards for Class 3 but be required to release not less than 0.1 cfs or the amount that would have naturally flowed in, whichever is less. This will ensure greater protection for the rivers and not rely on release rules in the old stream flow regulations. The 'extent practicable' should be determined through the use of a Site-Specific Flow Plan as described below.

Sec. 26-141b-6(a)(4) -- Clarifying that these release reductions in response to drought triggers also apply to the releases of small and other special condition reservoir systems. Also, consider explicitly referring to the concurrent water demand reductions expected under section 25-32d of the state regulations.

Presumptive Standards for Other Structures (direct withdrawal):

Sec. 26-141b-6(b)(1) -- Consider allowing greater alterations to flows for Class 2 and 3 rivers while still achieving the narrative standards for these classes. For example, the presumptive standard for Class 2 segments could be modified to the withdrawal limits currently proposed for

Class 3 rivers. Limiting changes during the rearing and growth bioperiod to 50% of Q99, as the current Class 3 standard requires, is likely to achieve the goal of providing flows that can support an aquatic community *minimally altered* from that typically present in free-flowing systems of similar types as required in the Class 2 narrative standard.

Consider modifying the Class 3 standard to allow for more water by-right as long as appropriate reductions for withdrawals during lows flows are included. For example, after some additional analysis, the Department might consider a presumptive standard in the form of a rule that allows a maximum potential depletion from the stream of:

X (e.g. 2.5) *Q99 except, that when river (or index gage) drops below Q90, withdrawal amounts are reduced by x% (e.g. 10%), when river (or index gage) drops below Q95, withdrawal amounts are reduced by x% (e.g. 25%), when the river flows (or index gage) drop below Q99, withdrawal amounts are limited to 50% of Q99.

Sec. 26-141b-6(b)(3) If Class 4 rivers are not eliminated as discussed above, modifying this section so that structure must operate to extent practicable within the limits of a Class 3 structure and submit a Site Specific Flow Plan (see below) describing how the structure will be operated to meet this requirement.

Sec. 26-141b-6(b)(2) Allowing owners and operators of dams and other structures to comply with the narrative standards by submitting for approval a "Site-Specific Flow Plan" to document how they will operate their system to be in compliance with the appropriate narrative standard. This would allow the Department to take into account specific situations where the particular configuration, situation of the dam or other structure or where other site-specific conditions make it not practical to operate as exactly prescribed under the presumptive standard.

Sec. 26-141b-7 Flow Management Compacts

We support the inclusion of watershed based flow management compacts as a means to achieve cumulative compliance on systems where multiple diverters interact. However, because of the potential level of effort for completing such a multi-party plan may entail, we recommend that Flow Management Compacts be required as the means to address situations where all operators are complying with their presumptive standard or site-specific flow plan but where the Department has determined that the stream segment or system does not meet the standard for its classification. This would appropriately focus the time, attention and resources of the department and those regulated under these regulations on areas where documented environmental impacts continue to occur. The information necessary for the plan, as provided in the current regulation, should be required 'as applicable' as not all of the items listed in Sec. 26-141b-7 (c) may always be necessary.

Statement of Purpose

Consider moving the "Statement of Purpose" to the beginning of Section 26-141b immediately following the short title.

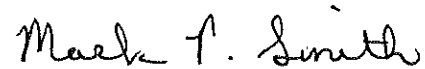
Enforcement:

Consider whether a more explicit enforcement section is warranted.

Finally, we encourage the state to continue to develop tools and other methods to determine the flows and withdrawals to be used in complying with the regulation. We also encourage the development of additional guidance on how to implement these regulations as well as such tools as an identified set of index gages which water users can use in implementing the requirements in lieu of installing site specific gages.

Thank you for the opportunity to comment. I urge the department to make the needed changes and move forward with these regulations as soon as possible. Please let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Mark P. Smith".

Mark P. Smith
Director
Eastern U.S. Freshwater Program